

### **Amendments to the Claims**

This listing of claims will replace all prior versions, and listings, of claims in the application.

#### **Listing of Claims:**

1-5. (Canceled)

6. (Currently Amended) A method for treating a gastrointestinal disorder; for treating and/or improving a gastrointestinal property of a COX-2 selective inhibitor; for decreasing the recurrence of an ulcer; for improving a gastroprotective property, an anti-*Helicobacter pylori* property or an antacid property of a proton pump inhibitor; or for improving a gastroprotective property of an H<sub>2</sub> receptor antagonist; in a patient in need thereof comprising administering to the patient a therapeutically effective amount of:

N-nitrato-pivaloyl-S-(N-acetyl-glycyl)-L-cysteine ethyl ester (compound SPM 5186) or a pharmaceutically acceptable salt thereof; N-nitrato-pivaloyl-S-(N-acetyl-alanyl)-L-cysteine ethyl ester (compound SPM 5185) or a pharmaceutically acceptable salt thereof; N-nitrato-pivaloyl-S-(N-acetyl-leucyl)-L-cysteine ethyl ester; N-(2-nitratoacetyl)-cysteine ethyl ester or a pharmaceutically acceptable salt thereof; N-(2-nitratoacetyl)-S-acetyl-cysteine ethyl ester or a pharmaceutically acceptable salt thereof; N-(2-nitratoacetyl)-S-propionyl-cysteine ethyl ester or a pharmaceutically acceptable salt thereof; N-(2-nitratoacetyl)-S-pivaloyl-cysteine ethyl ester or a pharmaceutically acceptable salt thereof; N-(2-nitratoacetyl)-methionine methyl ester or a pharmaceutically acceptable salt thereof; N-(2-nitratopropionyl)-cysteine or a pharmaceutically acceptable salt thereof; N-(2-nitratopropionyl)-cysteine ethyl ester or a pharmaceutically acceptable salt thereof; N-(2-nitratopropionyl)-methionine ethyl ester or a pharmaceutically acceptable salt thereof; N-(2-nitratobutyryl)-cysteine or a pharmaceutically acceptable salt thereof; N-(2-nitratobutyryl)-cysteine ethyl ester or a pharmaceutically acceptable salt thereof; N-(2-nitratobutyryl)-S-acetyl-cysteine ethyl ester or a pharmaceutically acceptable salt thereof; N-(2-nitratobutyryl)-S-butyryl-cysteine ethyl ester or a pharmaceutically acceptable salt thereof; N-(2-nitratobutyryl)-methionine ethyl ester or a pharmaceutically acceptable salt thereof; N-(2-nitratoisobutyryl)-cysteine or a pharmaceutically acceptable salt thereof; N-(2-nitratoisobutyryl)-cysteine ethyl ester or a pharmaceutically acceptable salt thereof; N-(2-nitratoisobutyryl)-S-benzoyl-cysteine ethyl ester or a pharmaceutically acceptable salt thereof; N-(2-nitratoisobutyryl)-S-acetyl-cysteine ethyl ester or a pharmaceutically acceptable salt thereof; N-(2-nitratoisobutyryl)-S-pivaloyl-cysteine ethyl ester or a pharmaceutically acceptable

~~salt thereof; N-(2-nitratoisobutyryl)-methionine ethyl ester or a pharmaceutically acceptable salt thereof; N-(3-nitratobutyryl)-cysteine or a pharmaceutically acceptable salt thereof; N-(3-nitratobutyryl)-cysteine ethyl ester or a pharmaceutically acceptable salt thereof; N-(3-nitratobutyryl)-S-acetyl-cysteine ethyl ester or a pharmaceutically acceptable salt thereof; N-(3-nitratobutyryl)-S-propionyl-cysteine ethyl ester or a pharmaceutically acceptable salt thereof; N-(3-nitratobutyryl)-methionine ethyl ester or a pharmaceutically acceptable salt thereof; N-(3-nitratobutyryl)-homocysteine thiolactone or a pharmaceutically acceptable salt thereof; N-(3-nitratopivaloyl)-cysteine or a pharmaceutically acceptable salt thereof; N-(3-nitratopivaloyl)-cysteine ethyl ester-S-ethyl carbonate or a pharmaceutically acceptable salt thereof; N-(3-nitratopivaloyl)-S-acetyl-cysteine ethyl ester or a pharmaceutically acceptable salt thereof; N-(3-nitratopivaloyl)-S-propionyl-cysteine ethyl ester or a pharmaceutically acceptable salt thereof; N-(3-nitratopivaloyl)-S-butyryl-cysteine ethyl ester or a pharmaceutically acceptable salt thereof; N-(3-nitratopivaloyl)-S-isobutyryl-cysteine ethyl ester or a pharmaceutically acceptable salt thereof; N-(3-nitratopivaloyl)-S-pivaloyl-cysteine ethyl ester or a pharmaceutically acceptable salt thereof; N-(3-nitratopivaloyl)-S-benzoyl-cysteine ethyl ester or a pharmaceutically acceptable salt thereof; N-(3-nitratopivaloyl)-methionine ethyl ester or a pharmaceutically acceptable salt thereof; N-(3-nitratopivaloyl)-methionine or a pharmaceutically acceptable salt thereof; N-(3-nitratopivaloyl)-homocysteine thiolactone or a pharmaceutically acceptable salt thereof; N-(2-nitratohexanoyl)-cysteine ethyl ester or a pharmaceutically acceptable salt thereof; N-(2-nitratohexanoyl)-S-propionyl-cysteine ethyl ester or a pharmaceutically acceptable salt thereof; N-(3-nitratohexanoyl)-cysteine ethyl ester or a pharmaceutically acceptable salt thereof; N-(3-nitratohexanoyl)-methionine methyl ester or a pharmaceutically acceptable salt thereof; N-(12-nitratolauroyl)-cysteine or a pharmaceutically acceptable salt thereof; N-(12-nitratolauroyl)-cysteine ethyl ester or a pharmaceutically acceptable salt thereof; N-(12-nitratolauroyl)-S-acetyl-cysteine or a pharmaceutically acceptable salt thereof; N-(12-nitratolauroyl)-S-pivaloyl-cysteine or a pharmaceutically acceptable salt thereof; or compound SPM 6373 N-(3-hydroxy-2,2-dimethyl-1-oxopropyl)-3-[(acetylamino)acetate]-L-cysteine ethyl ester (SPM 6373); or a pharmaceutically acceptable salt thereof.~~

7. (Previously Presented) The method of claim 6, further comprising administering a pharmaceutically acceptable carrier.

8. (Previously Presented) The method of claim 6, further comprising administering an NSAID, a COX-2 inhibitor, an H<sub>2</sub> receptor antagonist, a proton pump inhibitor, a vasoactive agent, a steroid, a  $\beta$ -agonist, an anticholinergic, a mast cell stabilizer, a PDE inhibitor, taxane, rapamycin, tranilast, or a combination of two or more thereof.

9. (Cancelled)

10. (Currently Amended) The method of claim 6, comprising administering to the patient N-nitrato-pivaloyl-S-(N-acetyl-glycyl)-L-cysteine ethyl ester (compound SPM 5186) ~~or a pharmaceutically acceptable salt thereof~~; N-nitrato-pivaloyl-S-(N-acetyl-alanyl)-L-cysteine ethyl ester (compound SPM 5185) ~~or a pharmaceutically acceptable salt thereof~~; N-(3-nitratopivaloyl)-S-pivaloyl-cysteine ethyl ester ~~or a pharmaceutically acceptable salt thereof~~; ~~or compound SPM 6373~~ N-(3-hydroxy-2,2-dimethyl-1-oxopropyl)-3-[(acetylamino)acetate]-L-cysteine ethyl ester (SPM 6373); or a pharmaceutically acceptable salt thereof.

11. (Previously Amended) The method of claim 6, wherein the method is the method for treating a gastrointestinal disorder.

12. (Previously Amended) The method of claim 6, wherein the method is the method for treating and/or improving a gastrointestinal property of a COX-2 selective inhibitor.

13. (Previously Presented) The method of claim 6, wherein the method is the method for decreasing the recurrence of an ulcer.

14. (Previously Presented) The method of claim 6, wherein the method is the method for improving a gastroprotective property of a proton pump inhibitor.

15. (Previously Presented) The method of claim 6, wherein the method is the method for improving an anti-*Helicobacter pylori* property of a proton pump inhibitor.

16. (Previously Presented) The method of claim 6, wherein the method is the method for improving an antacid property of a proton pump inhibitor.

17. (Previously Presented) The method of claim 6, wherein the method is the method for improving a gastroprotective property of an H<sub>2</sub> receptor antagonist.

18. (Currently Amended) A method for treating a gastrointestinal disorder; for treating and/or improving a gastrointestinal property of a COX-2 selective inhibitor; for decreasing the recurrence of an ulcer; for improving a gastroprotective property, an anti-*Helicobacter pylori* property or an antacid property of a proton pump inhibitor; or for improving a gastroprotective property of an H<sub>2</sub> receptor antagonist in a patient in need thereof comprising administering to the

patient a therapeutically effective amount of at least one compound selected from the group consisting of N-nitrato-pivaloyl-S-(N-acetyl-glycyl)-L-cysteine ethyl ester (~~compound SPM 5186~~) ~~or a pharmaceutically acceptable salt thereof~~; N-nitrato-pivaloyl-S-(N-acetyl-alanyl)-L-cysteine ethyl ester (~~compound SPM 5185~~) ~~or a pharmaceutically acceptable salt thereof~~; N-(3-nitratopivaloyl)-S-pivaloyl-cysteine ethyl ester ~~or a pharmaceutically acceptable salt thereof~~; and ~~compound SPM 6373~~; N-(3-hydroxy-2,2-dimethyl-1-oxopropyl)-3-[(acetylamino)acetate]-L-cysteine ethyl ester (SPM 6373); or a pharmaceutically acceptable salt thereof.

19. (Previously Presented) The method of claim 18, further comprising administering a pharmaceutically acceptable carrier.

20. (Previously Presented) The method of claim 18, further comprising administering an NSAID, a COX-2 inhibitor, an H<sub>2</sub> receptor antagonist, a proton pump inhibitor, a vasoactive agent, a steroid, a  $\beta$ -agonist, an anticholinergic, a mast cell stabilizer, a PDE inhibitor, taxane, rapamycin, tranilast, or a combination of two or more thereof.

21. (Currently Amended) The method of claim 18, comprising administering to the patient a therapeutically effective amount of N-nitrato-pivaloyl-S-(N-acetyl-glycyl)-L-cysteine ethyl ester (~~compound SPM 5186~~) or a pharmaceutically acceptable salt thereof.

22. (Currently Amended) The method of claim 18, comprising administering to the patient a therapeutically effective amount of N-nitrato-pivaloyl-S-(N-acetyl-alanyl)-L-cysteine ethyl ester (~~compound SPM 5185~~) or a pharmaceutically acceptable salt thereof.

23. (Previously Presented) The method of claim 18, comprising administering to the patient a therapeutically effective amount of N-(3-nitratopivaloyl)-S-pivaloyl-cysteine ethyl ester or a pharmaceutically acceptable salt thereof.

24. (Currently Amended) A method for treating and/or improving a gastrointestinal property of a COX-2 selective inhibitor; ~~for decreasing the recurrence of an ulcer~~; for improving a gastroprotective property, an anti-*Helicobacter pylori* property or an antacid property of a proton pump inhibitor; or for improving a gastroprotective property of an H<sub>2</sub> receptor antagonist in a patient in need thereof comprising administering to the patient a therapeutically effective amount of N-(3-nitratopivaloyl)-L-cysteine ethyl ester (SPM 3672); ~~compound SPM 3672~~ or a pharmaceutically acceptable salt thereof.

25. (Currently Amended) The method of claim 18, comprising administering to the patient a therapeutically effective amount of ~~compound SPM 6373~~ N-(3-hydroxy-2,2-dimethyl-

1-oxopropyl)-3-[(acetylamino)acetate]- L-cysteine ethyl ester (SPM 6373); or a pharmaceutically acceptable salt thereof.